

tions associated with ulnar subluxation accompanying Colles fracture. The plan of resecting the projecting portion of the ulna, because it forms a mechanical and functional block to the wrist joint, has apparently not been given serious consideration by previous writers.

Of the four cases which I have reported, in only one was there a subluxation of the head of the ulna. In the other three, the deformity was the result of radial shortening, one of the shaft and two of the lower articular end. The results in these few cases encourage me to suggest a more extended use of this procedure.

#### SUMMARY

In suitable cases, resection of the distal end of the ulna is often preferable to operative lengthening of the radius or to shortening of the ulnar shaft because:

- (a) The operative technique is greatly simplified.
- (b) It does away with the need for immobilization.
- (c) There is no possibility of non-union and less opportunity for infection.
- (d) Rotation of the forearm and lateral motion of the wrist are more completely restored.
- (e) The restoration of strength and the cosmetic results are generally better.

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**Louis Pasteur:** "Ideal in aim, but realist in method." Of all the worthwhile things that have been said of Louis Pasteur during the celebration recently of the centenary of his birth nothing more completely expresses the thought of scientific men than Willis Fletcher Johnson's brief note in the *North American Review*, where he says:

"Nothing could be said that would be more pertinent to the centenary of Louis Pasteur, or more accurately descriptive of the essential qualities of that illustrious man, than what, writing on an entirely different subject, Professor Vernon Kellogg says in another part of this Review; to wit, that if one is not a man of vision 'he will never be a great scientist,' and again: 'Ideal in aim, but realist in method.' Pasteur was supremely, perhaps above all other scientists of his age, a man of vision; his opponents called him visionary, an impractical dreamer of impossible dreams; and not in spite of that fact but, as Professor Kellogg suggests, because of it, or at least in accord with it, he became indisputably one of the very greatest scientists of the nineteenth century. It would be difficult to imagine a man more ideal in aim than he; aiming at the elimination of all zymotic and probably all communicable diseases of any kind from the world. It would be not merely difficult but impossible for anybody to be more realistic in method. His conceptions were like those of a spiritual creator; his working out of them vied in practicality and thoroughness with the inexorable processes of nature. In one supreme respect his work was—I write with all possible reverence—like unto that of the Creator of the universe; namely, its unity or at least harmony of design. He began as a chemist, dealing with what we may call the mechanics of chemistry; he became a biologist, at once denying most effectively the chemical origin of life and no less effectively demonstrating the commanding influence of life upon chemistry; and while showing forth as few others have ever done the almost incomprehensible wonders of the material world, he was ever the most resolute and devout of believers in the spiritual world. There is no department of human philosophy which may not fittingly and gratefully pay tribute to his fame."

## SYPHILITIC HEADACHE \*

### THE HEAD-PAINS OF EARLY AND LATE SYPHILIS WITH CASE REPORTS

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From the time of Fracastor it has been recognized that syphilis may cause headache. This symptom is usually present in varying degree at some stage of the infection and is then a signal of early or late neurosyphilis, of a specific affection of the cranial bones, or of an involvement of the cranial or peripheral nerves.

*The Headaches of Neurosyphilis*—The "typical" headache of the secondary period has been so fully described in the literature that physicians generally have the impression that all syphilitic head-pains must be clinically identical, with the result that syphilis is often erroneously ruled out as a causative factor in chronic headache. The headache accompanying or even preceding the florid stage is rather common. Out of 200 consecutive cases with early cutaneous lesions seen in our practice, headache was the symptom most complained of in eight instances and was present in varying degree in forty-two.

The pain in this condition may vary from a dull throbbing ache in mild cases to severe flashes, accompanied with fever, giddiness, a slowing of the pulse-rate, and even convulsions. Syphilitic cephalalgia is consistently worse at night. As a rule the pains start in the occipital region and spread up over the vertex in lightning-like flashes, but do not follow the course of any certain nerve. Often of vesperal onset, they may even awaken the unfortunate patient from deep sleep, with the whole body aching, as one expressed it, "in concert." While occasionally a superficial tenderness over the skull may suggest a periostitis, or a dull ache may resemble that of any acute infection, all the headaches of early syphilis should be regarded as due to an early meningeal irritation, unless definitely proven otherwise. That the central nervous system is not infrequently attacked during the period of spirochetal dissemination is proved by the clinical and laboratory findings of Moore, Fordyce and Rosen, Wile and Stokes, and the experimental work of Brown and Pearce.

In cerebrospinal syphilis (those cases showing chiefly a meningomyelitis, gummosis infiltration, meningitis and specific arteritis, not including paresis or tabes), the headaches are practically continuous, but of great variation in intensity. In sharp contradistinction to those of early syphilis, pain in this group has a strong tendency to exacerbate in the day-time. Transitory visual disturbances may be present with or without other signs of increased intracranial pressure. Posture rarely has any effect on the symptom and in women there is no relation to the menses. On light percussion over the forehead, tenderness may be found, which Mott believes is a valuable sign of meningitis of the convexity.

There may be nothing suggestive of syphilis,

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aside from the chronicity of the symptom in the headaches of paresis and tabes. White found five out of 140 patients with paresis suffering with head-pain. On questioning the relatives of 83 paretics, 11 of the insane were found to have complained of pain varying from dull aches to "migraine" and "neuralgia" one to five years before the onset of definite mental symptoms. With the progress of the disease the symptom was complained of less and less. In early paresis vague headache associated with irritability, thoughtlessness and fleeting phobias, is not uncommon and has been well described by the older writers who designated the condition as a para-syphilitic cephalalgia.

Tabetics rarely give a history of frequent headache nor is it a common presenting symptom in this disease. Pain due to meningeal involvement must depend upon the degree of irritation, as basilar meningitis is a fairly uniform finding in tabes dorsalis.

*Pain due to Syphilis in the Bony Vault*—Fournier in 1899 called attention to the early osteal and periosteal involvement of the cranial bones causing head-pain. The periosteal lesion may cause exquisite pain on light palpation over the skull, with scattered, sharply circumscribed areas of slight edema over the forehead and parietal regions. The characteristic endoscopic bone pains of the extremities may be duplicated in the cranium and are then typically worse at night.

In late syphilis the frontal and parietal bones are favorite sites for gummatous processes. Should the lesion be internal all the signs of increase of intracranial pressure will be present, including even epileptiform convulsions and paralyses. If the periosteum and overlying structures become involved the clinical diagnosis becomes easier. A tumor mass, tender on light palpation but extremely sensitive when the bony rim of the lesion is made out, will be found. The pain is usually dull and sharply limited to the lesion, of sudden onset with increasing severity. Contrary to the observation of Hnatek, I have not found it to be especially worse at night.

*Head-pain due to Syphilis of the Cranial and Peripheral Nerves*—Pain following the course of a cranial or peripheral nerve is rather an uncommon finding in syphilis. Out of 200 syphilitics with headache as a presenting symptom, this condition was present only twice. One patient suffered with pain over the distribution of the mandibular division of the trifacial nerve and another following the course of the major occipital. There was in both instances a sudden onset, following which there was never a total absence of pain, but there was the greatest variation in its intensity from day to day. In one man observed during an exacerbation of a continuous pain, tender spots were elicited over the course of the affected nerve and there was a distinct loss of the sensibility of heat and cold. This condition was considered to be a neuritis, as Byrnes has pointed out that in true neuralgia, or tic douloureux, the individual is entirely free from pain in the intervals between attacks. Should anesthesia be found over a nerve

distribution, it should not necessarily point towards a true neuralgia.

The direct cause of a syphilitic neuritis may be pressure exerted on the nerve somewhere in its course by syphilitic new-growths or an infiltration of the nerve itself.

#### REPORT OF CASES

##### Headache-Cerebrospinal Syphilis

**Case 1.—History**—A painter, aged 37, complained of headache and spells. He denied any genital lesion but said he had had sores on both legs diagnosed as syphilitic by an army surgeon twelve years before. He had been dismissed with a bottle of mercury pills and, on the disappearance of the skin manifestations had imagined himself cured. Eight days before the examination was made he noticed cramps in the right arm and leg lasting thirty minutes, accompanied with a throbbing pain in the base of the skull. The attacks of headache were now practically continuous and not controlled by aspirin.

**Examination**—The pupils were unequal, the left larger than the right but were fairly regular and reacted promptly to light. The deep reflexes were normal throughout. There was some muscular weakness in the left leg and the head of its fibula was enlarged. Characteristic atrophic scars were found on both legs. The serum-Wassermann was weakly positive. The spinal fluid was under pressure and contained 23 lymphocytes, globulin was positive, as was the Wassermann reaction. There was a luetic gold curve.

**Treatment**—After intensive treatment with soluble mercury the patient was put on arsphenamin. The headache stopped following spinal puncture and under treatment did not recur. Puncture two months later revealed a normal fluid.

**Case 2.—History**—A negro housewife, aged 40, complained of a dull, continuous headache which tended to wear off towards night. Six months before she had awakened with a pain in the right hip and could not rise from bed although perfectly conscious. She remained in bed for three weeks and noticed on raising her head a stabbing pain in the vertex. Her speech at this time was heavy and swallowing was difficult. The right arm and leg trembled and stiffened on handling.

**Physical Examination**—There was a marked lateral nystagmus and definite weakness of the left seventh and twelfth nerves, with a spastic paralysis of the right arm and leg. The signs of aortic regurgitation were present and fluoroscopy revealed a dilatation of the ascending aorta. The serum-Wassermann was positive and the spinal fluid showed 24 lymphocytes per c. mm.; a positive Globulin test and the Wassermann positive with two c. c.

**Treatment**—After a preparatory course of mercury rubs and potassium iodide, and before any arsphenamin was administered, the headaches disappeared, the paralysis was less marked, and the patient refused further treatment.

##### Headache—Gumma of the Frontal Bone

**Case 3. History**—A married man, aged 29, complained of an ache limited to the left side of the forehead, which had been present continuously during his waking hours for one week. He had had a genital chancre in 1912 and had received mercury injections for two years thereafter.

**Physical Examination**—The first time the patient was examined nothing was found to account for the pain. There was a moderate cardiac enlargement with pulsation of the neck vessels but no obvious signs of an aortitis. Eight days later, however, a tumor, 3 cm. in diameter, was discovered on

the left side of the frontal bone. The mass was tender on palpation, but there was no local heat nor redness and no enlargement of the pre-auricular lymph nodes. A roentgenogram revealed a localized periostitis with bony destruction. The serum-Wassermann was strongly positive.

**Treatment.**—The patient was given arsphenamin and mercury with large doses of potassium iodide by mouth and the lesion with the pain promptly disappeared.

#### Headache—Syphilitic Neuritis of the Major Occipital Nerve

**Case 4. History.**—A hotel owner, aged 54, complained bitterly of a dull ache confined to the right side of the occiput which was subject to severe flare-ups and which had been present in varying amount for five weeks. He denied having acquired syphilis, but as he was a dipsomaniac, admitted the possibility of having become infected while on a spree.

**Physical Examination.**—The patient was a large fat man, very worried and apprehensive. There was a dermatitis over the back of the head and neck from the application of irritants. A slight anesthesia made out over the distribution of the occipitalis major with a distinct loss of sensibility to heat and cold. The pupils were normal and there was no change in any of the deep reflexes. A perforated nasal septum was found. The serum-Wassermann test was negative, as was the spinal fluid examination.

**Treatment.**—Because of the negative blood test, a provocative injection of arsphenamin was given, and blood collected in 24 hours was found weakly positive. The first injection caused a sharp increase in pain (Herxheimer reaction) but under continued treatment the symptom gradually disappeared.

Aside from the severe headache seen so often in early syphilis, there is little that is typical in the symptomatology of syphilitic headache. Syphilis should be suspected in all instances where head-pain is a prominent and chronic symptom. Headaches which do not disappear on the correction of refractive errors, to the removal of foci and the draining of sinuses, nor to that procedure known as a "cleaning out of the intestinal tract," should arouse the suspicion in the mind of the attending physician that syphilis may be present, and an examination for other signs of syphilis should be made. Among the various diagnostic procedures enumerated by Stokes and Busman, the examination of the fundus, the comprehensive study of the central nervous system, the eye, ear, nose and throat examination, and a careful skin and mucous membrane examination, are the clinical procedures most often rewarded by the finding of other signs of syphilis. In syphilitic of the vault the X-Ray may often confirm the diagnosis, while a solitary brain gumma may cast the shadow of a brain tumor. Fluoroscopy may reveal an aneurysm in the chest, or other evidences of syphilis. The serum-Wassermann test and the spinal fluid examination (cell count, estimation of protein, Wassermann and colloidal gold) are of paramount importance in the diagnosis of syphilis and especially of syphilitic headache. While the therapeutic test may occasionally be fallacious it should be used in all doubtful cases.

## UTERINE MYOMATA AND THEIR TREATMENT\*

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This paper will not take up the histogenesis, etiology or go extensively into the pathology of uterine myomata.

The location of such a tumor is of clinical importance in deciding upon the preferable method of treatment and it is necessary to bear in mind the different varieties and their symptoms, their location and size and what degenerative processes they have undergone, as well as the complications that exist or may arise.

The question whether the cavity of the uterus is infected is very important from a radiological and surgical standpoint. Uterine myomata may become infected in several ways. Quite frequently they become part of a pelvic inflammation that results from a gonorrhoeal or puerperal infection. When this occurs the inflammation is confined to the peritoneal covering of the tumor and to the surrounding tissues and is manifested by adhesions, hydrosalpinx, hemosalpinx, salpingitis and tubo-ovarian cysts. These very same conditions occur, however, when venereal or puerperal infection can be ruled out. The infection is then carried through the general circulation. This has been proved by the discovery of pathogenic germs in the tissues of fibroids and explains the mysterious elevation of temperature in some myomatous women.

From a surgical standpoint, the bladder occupies a very important position in its relation to the myomatous uterus. Generally its position is unaltered, but I have seen it pulled upward by the tumor and spread over the anterior surface. At other times I have noticed that sometimes in the development of the tumor it becomes involved in the growth of a nodule and as the general enlargement takes place the bladder is pulled upward and to one side. This forms a long funnel shaped bladder extending sometimes as high as the umbilicus and constitutes a very grave and dangerous complication if injured during operation. The ureter is frequently dilated or displaced by being pulled out of its normal pelvic bed. Hydro-nephrosis may occur as the result of obstruction due to adhesions, kinking, twisting or mechanical pressure upon the tube itself.

Adeno-myomata are distinguished from the ordinary type by the diffuse manner in which they grow in the uterine wall. Their commonest site of growth is in the posterior wall of the uterus near the uterine horns. Rarely do they attain large dimensions. On account of the diffuse nature of their development, it is often difficult to differentiate between tumor and uterine wall. As a rule in these cases the uterus conforms to the normal contour, although it often has a few nodules scattered over its surface. On microscopic examination, it is found that the muscle fibres have become coarse in texture and converted into myomatous tissue. Into the coarse muscle sub-

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